

Western Numeric Nutrient Criteria Workshop

May 1–3, 2018

Draft Agenda

Meeting Location

U.S. EPA Region 9 Office
75 Hawthorn Street
San Francisco, CA 94105

DAY 1—TUESDAY, MAY 1

12:00–12:20 pm

Welcome and Introductory Remarks

Dana Thomas, Chief, Ecological Health Processes Branch EPA
Headquarters and Tomás Torres, EPA Region 9 Water Division Director

12:20–12:25 pm

Agenda Overview and Logistics

Stephen Maurano, Water Quality Standard Coordinator, Office of Water
Quality Assessment, EPA Region 9

12:25–12:45 pm

Ice Breaker—TBD

Freshwater: Lakes and Reservoirs

12:45–4:30 pm

Deriving Nutrient Criteria for Lakes/Reservoirs

12:45–2:15 pm

Endpoint Selection and Reducing Variability of Stressor- Response Analyses

Lester Yuan, EPA Office of Water

2:15–3:15 pm

Shifts in Phytoplankton Community Structure and Function as Indication of Nutrient Pollution for Lakes and Reservoirs

Eric Hargett, Wyoming Department of Environmental Quality

Washington's Reference Guidance Criteria

Dustin Bilhimer, Washington State Department of Ecology

3:15–3:30 pm

Break

3:30–4:00 pm

Lessons Learned in Establishing Numeric Nutrient Criteria on the Pyramid Lake Reservation

Kameron Morgan, Pyramid Lake Paiute

4:00–4:30 pm	Group Discussion: Next Steps to Advance Nutrient Criteria Development for Lakes Tina Laidlaw, Regional Nutrient Criteria Coordinator, Region 8 Water Quality Unit -Montana Office, EPA Region 8
4:30-5:30 pm	Placeholder for Overarching Presentations by Expert Scientists
5:30 pm	Networking Event

DAY 2–WEDNESDAY, MAY 2

<i>Freshwater: Rivers and Streams</i>	
8:30 am–12:00 pm	Deriving Numeric Nutrient Criteria or Nutrient Thresholds for Rivers and Streams
8:30–10:05 am	<i>Using Algal Indicators and Other Tools-Panel Discussion on the Use of Diatoms to Derive Nutrient Criteria Thresholds</i> Jason Pappani, Idaho Department of Environmental Quality; Aron Borok or Shannon Hubler (via webinar), Oregon Department of Environmental Quality and Dustin Bilhimer, Washington State Department of Ecology <i>N-STEPS Support: How to Control for Variability and Confounding Factors in Stressor Response Analysis of Nutrient and Diatom Data</i> Michael Paul, Tetra Tech <i>Algal and Macroinvertebrate Indicators of Nutrient Pollution</i> Jessie Maxfield, California State Board <i>Exploring Ecological Indicators of Nutrient Pollution in Utah’s Headwaters</i> Jeff Ostermiller, Utah Department of Environmental Quality
10:05–10:20 am	Break
10:20 am–12:00 pm	<i>Development of Nutrient Thresholds Derived Using Visual Algal Surveys for Wadeable Streams</i> Randy Pahl, Nevada Division of Environmental Protection <i>Researching Algal Indicators of Excess Nutrients in Arizona Streams</i> Patti Spindler, Arizona Department of Environmental Quality <i>Placeholder for Development Criteria Protective of Rivers, Streams and Downstream</i> Hanna Winter, Lummi Natural Resources <i>Nutrient Monitoring on the Colville Indian Reservation</i> Bessie Wright, Confederated Tribes of the Colville Reservation <i>Modelling Approaches and Challenges in Setting up Nutrient Criteria for Large Rivers</i> Mike Suplee, Montana Department of Environmental Quality

12:00–1:00 pm	Lunch
1:00–1:30 pm	Group Discussion: Challenges and Potential Solutions to the Development and Adoption of Nutrient Criteria in Rivers and Streams Stephen Maurano, Water Quality Standards Coordinator, Office of Water Quality Assessment, EPA Region 9
1:30–3:30 pm	Putting Numeric Nutrient Criteria and Nutrient Thresholds into Action <i>Group Exercise: Use of Multiple Lines of Evidence to Support Numeric Nutrient Criteria</i> Mike Paul, Tetra Tech
3:30–3:45 pm	Break
3:45–4:00 pm	Wrap up and Action Items Mike Paul, Tetra Tech
4:00–5:30 pm	EPA Marketplace Poster Presentations & Hands-on Interactive Displays

DAY 3—THURSDAY, MAY 3

Putting Numeric Nutrient Criteria and Nutrient Thresholds into Action (Continued)

8:30–10:30 am	Putting Numeric Nutrient Criteria and Nutrient Thresholds into Action (continued) Moving from Criteria Adoption to Implementation: Lessons Learned to Overcome Challenges and Misperceptions <i>Placeholder for a trading presentation (via webinar) TBD</i> Idaho (tentative) <i>Science-based Numeric Nutrient Criteria can be Hard to Meet: The Approaches and Challenges to Implementing them in a State Water Quality Program</i> Mike Suplee, Montana Department of Environmental Quality <i>Placeholder for a presentation on UAAs</i> Raphael Mazor, Southern California Coastal Water Research Project <i>Placeholder for presentation</i> Myron Honda, Hawaii State Department of Health <i>Placeholder for presentation</i> Gary Colegrove, Hoopa Valley Tribe
10:30–10:35 am	Ice Breaker—TBD

10:35–11:00 am **Feedback and Next Steps**
EPA (TBD) and volunteer state and tribal representatives

11:00–11:15 am **Break**

Marine: Estuaries and Coastal Waters

11:15 am–12:00 pm **Estuarine Protection and Downstream Protection**
Emerging HABs, HABs Toxicity and HABs Fluxes Linked to Anthropogenic Sources
Raphael M. Kudela, University of California Santa Cruz
Development of Nutrient Criteria Thresholds for Pacific Northwest Estuaries: A Case Study of Yaquina Estuary, Oregon
Cheryl Brown, Office of Research and Development (EPA's National Health and Environmental Effects Research Lab)

12:00–12:45 pm **Working Lunch—Novel Strategies to Ensure Downstream Protection**
San Francisco Estuary Efforts to Reduce Nutrient Pollution
David Senn, San Francisco Estuary Institute
Puget Sound Nutrient Dynamics and Source Reduction Project
Dustin Bilhimer, Washington State Department of Ecology

12:45–12:55 pm **Break**

12:55–1:45 pm **Panel and Interactive Discussion**
Use and Applicability of Nutrient Models and Other Tools to Address Nutrient Pollution
Martha Sutula, Southern California Coastal Water Research Project; Dustin Bilhimer, Washington State Department of Ecology and Cheryl Brown, Office of Research and Development (EPA's National Health and Environmental Effects Research Lab)

Open Discussion on Technological Needs

1:45–2:15 pm **Group Discussion: Current and Future Approaches to the Reduction of Nutrient Pollution in Estuarine and Coastal Waters**
Rochelle Labiosa, Water Quality Standards Nutrients Coordinator, EPA Region 10

2:15 pm **Adjourn**